APPENDIX

IN THE TITLE

~~**T1R HETERO-OLIGOMERIC TASTE RECEPTORS**~~
USE OF T1R HETERO-OLIGOMERIC TASTE RECEPTOR to SCREEN for COMPOUNDS THAT MODULATE TASTE SIGNALING

IN THE SPECIFICATION
Amend page 1, paragraph 1 as follows:

This application claims priority to ~~is related to~~ US Provisional Application Serial No. ~~60/280,606~~ 60/284,547, filed April 19, 2001, and to U.S. Provisional Application Serial No. 60.300,434, ~~claims priority of U.S. Provisional Patent Application~~ entitled "T1R Hetero-Oligomeric Taste Receptors" filed June 26, 2001, the entire contents of which are herein incorporated by reference ~~in its entirety~~.

Amend page 69, lines 7 and 12 as follows:

hT1R2 and hT1R3 Function in Combination and Couple to $G_{\alpha 15}$

To demonstrate that hT1R2 and hT1R3 function in combination, we transfected the receptors individually and in combination into HEK-G15 cells. We have determined that T1R2/T1R3 activity is not enhanced by incorporation of PDZIP into the receptors; consequently, unmodified receptors are used in the assays described herein. Transfected cells were loaded with Fluo-4, and their responses to a mixture of sweet taste stimuli (Saccharin, Cyclamate, AcesulfameK, Aspartame, 10mM each) were determined by fluorescence microscopy. Responses of imaged fields of transfected cells are shown in Fig. 4. Responses to the sweetener pool were only detected in cells co-transfected with hT1R2 and hT1R3 (panel C), but not with hT1R2 (panel A) or hT1R3 (panel B) alone. The G-protein dependence of T1R2/T1R3 activity was similarly determined by co-transfection of the T1Rs and different G proteins into HEK-293T cells, which unlike HEK-G15 cells do not express $G_{\alpha 15}$. In the panels below, sucrose (120 mM) responses were detected in cells that transiently express $G_{\alpha 15}$ (panel E), but not Gq (panel D). Thus, T1R2 and T1R3 together are

activated by sweet taste stimuli, and they couple to G_{gust15}, thereby allowing their activity to be determined by fluorescence-based whole-cell assay.